



## DEPARTMENT OF ENERGY

### 10 CFR Part 431

[EERE-2017-BT-STD-0048]

RIN 1904-AE38

#### **Energy Conservation Program: Test Procedure for Dedicated-Purpose Pool Pump Motors**

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Final rule.

**SUMMARY:** On October 5, 2020, the U.S. Department of Energy (“DOE”) issued a notice of proposed rulemaking (“NOPR”) to establish a test procedure and an accompanying labeling requirement for dedicated purpose pool pump (“DPPP”) motors. This final rule establishes a test procedure for DPPP motors. Specifically, the final rule incorporates by reference an industry standard pertaining to DPPP definitions; and requires the use of an industry testing standard for testing the energy efficiency of DPPP motors. This final rule does not establish a labeling requirement and DOE intends to address any such labeling and/or energy conservation standards requirement in a separate notification.

**DATES:** The effective date of this rule is [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** The docket, which includes *Federal Register* notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is

available for review at *www.regulations.gov*. All documents in the docket are listed in the *www.regulations.gov* index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

A link to the docket web page can be found at *www.regulations.gov/docket?D=EERE-2017-BT-STD-0048*. The docket web page contains instructions on how to access all documents, including public comments, in the docket.

For further information on how to review the docket contact the Appliance and Equipment Standards Program staff at (202) 287-1445 or by e-mail:

*ApplianceStandardsQuestions@ee.doe.gov*.

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**SUPPLEMENTARY INFORMATION:** DOE incorporates by reference the following industry standards into 10 CFR part 431:

CSA C747-09 (Reaffirmed 2014), “Energy Efficiency Test Methods for Small Motors,” as revised through August 2016, including Update No. 1.

Copies of CSA C747-09, can be obtained from the Canadian Standards Association (“CSA”), Sales Department, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 1–800–463–6727, or <https://www.csagroup.org/store>.

UL 1004-10:2020, “Standard for Safety for Pool Pump Motors”, First Edition,  
Dated February 28, 2020.

Copies of UL 1004-10:2020, Edition 1, can be obtained from Underwriters Laboratories (“UL”), 333 Pfingsten Road, Northbrook, Illinois, 60062, (841) 272-8800 or <https://www.ul.com>.

For a further discussion of these standards, see section IV.N.

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**I. Authority and Background**

Electric motors are included in the list of “covered equipment” for which DOE is authorized to establish and amend energy conservation standards, test procedures, and labeling requirements. (42 U.S.C. 6311)(1)(A)). Electric motors include dedicated-purpose pool pump motors (“DPPP motors” or “pool pump motors”), the subject of this rulemaking.<sup>1</sup> The following sections discuss DOE’s authority to establish a test procedure for DPPP motors, and relevant background information regarding DOE’s consideration of a test procedure for this equipment.

*A. Authority*

The Energy Policy and Conservation Act, as amended (“EPCA”),<sup>2</sup> among other things, authorizes DOE to regulate the energy efficiency of a number of consumer products and certain industrial equipment. (42 U.S.C. 6291–6317) Title III, Part C<sup>3</sup> of EPCA, added by Public Law 95-619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency. This equipment includes those electric motors that are DPPP motors, the subject of this document. (42 U.S.C. 6311(1)(A))

The energy conservation program under EPCA consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification

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<sup>1</sup> An electric motor is defined as “a machine that converts electrical power into rotational mechanical power.” 10 CFR 431.12.

<sup>2</sup> All references to EPCA in this document refer to the statute as amended through the Energy Act of 2020, Public Law 116-260 (Dec. 27, 2020).

<sup>3</sup> For editorial reasons, upon codification in the U.S. Code, Part C was redesignated Part A-1.

and enforcement procedures. Relevant provisions of EPCA specifically include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

The Federal testing requirements consist of test procedures that manufacturers of covered equipment must use as the basis for: (1) certifying to DOE that their equipment complies with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6316(a); 42 U.S.C. 6295(s)), and (2) making representations about the efficiency of that equipment (42 U.S.C. 6314(d)). Similarly, DOE must use these test procedures to determine whether the equipment complies with relevant standards promulgated under EPCA. (42 U.S.C. 6316(a); 42 U.S.C. 6295(s))

Federal energy efficiency requirements for covered equipment established under EPCA generally supersede State laws and regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6316(a) and (b); 42 U.S.C. 6297)

Under 42 U.S.C. 6314, EPCA outlines the criteria and procedures DOE must follow in prescribing test procedures for covered equipment. EPCA requires that any test procedure prescribed or amended under this section must be reasonably designed to produce test results which reflect energy efficiency, energy use, and estimated operating costs of a type of industrial equipment (or class thereof) during a representative average use cycle (as determined by the Secretary), and shall not be unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) Before issuing a final test procedure, the Secretary shall publish the proposed test procedure in the *Federal Register* and afford interested persons

an opportunity (of not less than 45 days' duration) to present oral and written data, views, and arguments on the proposed test procedures. (42 U.S.C. 6314(b))

When the Secretary has issued a test procedure under section 6314 of EPCA for a specific class of industrial equipment, the Secretary shall also prescribe a labeling rule for that equipment, subject to certain statutory criteria. (42 U.S.C. 6315(a)) EPCA establishes specific requirements for the labeling of classes of equipment, including electric motors, for which test procedures have been established. (42 U.S.C. 6315(a), (b) and (d)) The labeling rule shall provide that the labeling of any electric motor manufactured after the 12-month period beginning on the date the Secretary prescribes such labeling rules, shall: (1) indicate the energy efficiency of the motor on the permanent nameplate attached to such motor; (2) prominently display the energy efficiency of the motor in equipment catalogs and other material used to market the equipment; and (3) include such other markings as the Secretary determines necessary solely to facilitate enforcement of the standards established for electric motors under section 6313 of this title. (42 U.S.C. 6315(d)) DOE is publishing this final rule to establish a test procedure for DPPP motors pursuant to its authority under EPCA. As stated, DOE intends to address labeling in a separate notification.

### *B. Background*

DPPP motors are electric motors, which are defined as machines that convert electrical power into rotational mechanical power. 10 CFR 431.12. DOE has established test procedures, labeling requirements, and energy conservation standards for certain electric motors (10 CFR part 431, subpart B), but those requirements do not apply to DPPP motors subject to the testing requirements of this final rule. DPPP motors subject

to the testing requirements of this final rule had not previously been subject to any Federal energy conservation standards, test procedures, or labeling requirements because they do not fall within any of the specific classes of electric motors that are currently regulated by DOE.<sup>4</sup> However, DPPP motors are electric motors and, therefore, are and have been among the types of industrial equipment for which Congress has authorized DOE to establish applicable regulations under EPCA without need for DOE to undertake any additional prior administrative action.

As a general matter, DOE notes that 42 U.S.C. 6297, as applied to certain industrial equipment through 42 U.S.C. 6316(a), provides that Federal preemption applies to testing and labeling requirements of equipment covered under EPCA.<sup>5</sup> *See* 42 U.S.C. 6297(a). Federal preemption also generally applies to energy use and energy efficiency or water use of covered products both before and after Federal energy conservation standards become effective. *See* 42 U.S.C. 6296(b)-(c). In the October 2020 NOPR, DOE discussed the historical backdrop of electric motor regulation and the statutory framework that indicates that covered equipment specified by Congress (in this case, electric motors) are subject to Federal preemption regardless of whether Federal energy conservation standards, labeling requirements, or test procedures have been established. 85 FR 62816, 62818. Accordingly, DOE notes that efforts by States to set energy

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<sup>4</sup> The current energy conservation standards at 10 CFR 431.425 apply to electric motors that satisfy nine criteria listed at 10 CFR 431.425(g), subject to the exemptions listed at 10 CFR 431.25(l). The nine criteria are as follows: (1) are single-speed, induction motors; (2) are rated for continuous duty (MG1) operation or for duty type S1 (IEC); (3) contain a squirrel-cage (MG1) or cage (IEC) rotor; (4) operate on polyphase alternating current 60-hertz sinusoidal line power; (5) are rated 600 volts or less; (6) have a 2-, 4-, 6-, or 8-pole configuration; (7) are built in a three digit or four-digit NEMA frame size (or IEC metric equivalent), including those designs between two consecutive NEMA frame sizes (or IEC metric equivalent), or an enclosed 56 NEMA frame size (or IEC metric equivalent); (8) produce at least one horsepower (0.746 kW) but not greater than 500 horsepower (373 kW), and; (9) meet all of the performance requirements of one of the following motor types: A NEMA Design A, B, or C motor or an IEC Design N or H motor. The exemptions listed at 10 CFR 431.25(l) are: (1) air-over electric motors; (2) component sets of an electric motor; (3) liquid-cooled electric motors; (4) submersible electric motors; and (5) inverter-only electric motors.

<sup>5</sup> Both pumps (such as DPPPs) and electric motors are treated as covered industrial equipment under EPCA, thus providing the legal basis for DOE's authority to regulate these types of equipment. *See* 42 U.S.C. 6311(1).

conservation standards, test procedures, or labeling requirements for DPPP motors – or any other electric motor – are preempted as a matter of law.<sup>6</sup>

On January 18, 2017, DOE published a direct final rule establishing energy conservation standards for dedicated-purpose pool pumps (“DPPPs”). 82 FR 5650 (the “January 2017 Direct Final Rule”).<sup>7</sup> Acknowledging comments received in response to the direct final rule in support of regulating DPPP motors that would serve as replacement motors to the regulated pool pumps, DOE published a notice of public meeting and held a public meeting on August 10, 2017, to consider potential scope, definitions, equipment characteristics, and metrics for pool pump motors. 82 FR 30845 (July 3, 2017). DOE also requested comment on potential requirements for pool pump motors in a request for information (“RFI”) pertaining to test procedures for small electric motors and electric motors. 82 FR 35468, 35474 (July 31, 2017). On August 14, 2018, DOE received a petition submitted by a variety of entities (collectively, the “Joint Petitioners”)<sup>8</sup> requesting that DOE issue a direct final rule to establish prescriptive standards and a labeling requirement for DPPP motors (“Joint Petition”).<sup>9</sup> The Joint Petitioners sought a compliance date of July 19, 2021, to align with the standards compliance date for DPPPs. (Id.) See also 82 FR 24218 (May 26, 2017). DOE published a notice of the Joint Petition and sought comment on whether to proceed with

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<sup>6</sup> EPCA defines an “energy conservation standard” as either a performance standard prescribing a minimum level of energy efficiency or a maximum quantity of energy use for a product or a design requirement for a product. See 42 U.S.C. 6311(18).

<sup>7</sup> DOE confirmed the adoption of the standards and the effective date and compliance date in a notice published on May 26, 2017. 82 FR 24218. DOE also established a test procedure for DPPPs. 82 FR 36858 (August 7, 2017).

<sup>8</sup> The Joint Petitioners are: The Association of Pool & Spa Professionals, Alliance to Save Energy, American Council for an Energy-Efficient Economy, Appliance Standards Awareness Project, Arizona Public Service, California Energy Commission, California Investor Owned Utilities, Consumer Federation of America, Florida Consumer Action Network, Hayward Industries, National Electrical Manufacturers Association, Natural Resources Defense Council, Nidec Motor Corporation, Northwest Power and Conservation Council, Pentair Water Pool and Spa, Regal Beloit Corporation, Speck Pumps, Texas ROSE (Ratepayers’ Organization to Save Energy), Waterway Plastics, WEG Commercial Motors, and Zodiac Pool Systems.

<sup>9</sup> The Joint Petition is available at [www.regulations.gov/document?D=EERE-2017-BT-STD-0048-0014](http://www.regulations.gov/document?D=EERE-2017-BT-STD-0048-0014).



the proposal, as well as any data or information that could be used in DOE's determination of whether to issue a direct final rule. 83 FR 45851 (September 11, 2018).<sup>10</sup>

On December 12, 2018, representatives from APSP, NEMA, Nidec Motors, Regal Beloit, and Zodiac met with DOE to reiterate the need for implementation of the Joint Petition. (December 2018 *Ex Parte* Meeting, No. 42 at p. 1)<sup>11</sup> On February 5, 2019, the Association of Pool & Spa Professionals (“APSP”), National Electrical Manufacturers Association (“NEMA”), Hayward, Pentair, Nidec Motors, Regal Beloit, WEG Commercial Motors, and Zodiac Pool Systems met with DOE to present an alternative approach to the Joint Petition, suggesting DOE propose a labeling requirement for DPPP motors. (February 2019 *Ex Parte* Meeting, No. 43 at p. 1)<sup>12</sup> These interested parties specifically requested that DOE base the labeling requirement on a newly-available industry standard for pool pump motors published on July 1, 2019 (UL 1004-10:2019, “Pool Pump Motors”), a design standard that incorporates some of the proposals contained in the Joint Petition. (February 2019 *Ex Parte* Slides, No. 43 at pp. 9-10) A follow-up memorandum was submitted to DOE on March 1, 2019, providing additional information related to UL 1004-10:2019. (March 2019 *Ex Parte* Memo, No. 44) The interested parties noted the timelines and costs that would be involved in applying a label

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<sup>10</sup> Docket No. EERE-2017-BT-STD-0048, available at: [www.regulations.gov/docket?D=EERE-2017-BT-STD-0048](http://www.regulations.gov/docket?D=EERE-2017-BT-STD-0048).

<sup>11</sup> With respect to each of the ex parte communications noted in this document, DOE posted a memorandum submitted by the interested party/parties that summarized the issues discussed in the relevant meeting as well as its date and attendees, in compliance with DOE’s Guidance on *Ex Parte* Communications. 74 FR 52795-52796 (Oct. 14, 2009). The memorandum of the meeting as well as any documents given to DOE employees during the meeting were added to the docket as specified in that guidance. See *Id.* at 74 FR 52796.

<sup>12</sup> The parenthetical reference provides a reference for information located in the docket of DOE’s rulemaking to develop the test procedure requirements for DPPP motors. (Docket No. EERE-2017-BT-STD-0008, which is maintained at [www.regulations.gov/#!docketDetail;D=EERE-2017-BT-STD-0008](http://www.regulations.gov/#!docketDetail;D=EERE-2017-BT-STD-0008)). The references are arranged as follows: (commenter, comment docket ID number, page of that document).

to the affected pool pump motors and the impacts flowing from past labeling efforts.

(*See generally Id.* at 1-3.)

On October 5, 2020, DOE published a NOPR proposing to establish a test procedure and an accompanying labeling requirement for DPPP motors. 85 FR 62816. (“October 2020 NOPR”) Specifically, DOE proposed to incorporate by reference UL Standard 1004-10:2019 “Outline of Investigation for Pool Pump Motors” (“UL 1004-10:2019”) pertaining to DPPP definitions and marking requirements; require the use of CSA C747-09 (R2014), “Energy Efficiency Test Methods for Small Motors” (“CSA C747-09”) for testing the energy efficiency of DPPP motors; require the nameplate of a subject DPPP motor (1) to include the full-load efficiency of the motor as determined under the proposed test procedure, and (2) if the DPPP motor is certified to UL-1004-10:2019, to include the statement, “Certified to UL 1004-10:2019”; require that catalogs and marketing materials include the full-load efficiency of the motor; require manufacturers to notify DOE of the subject DPPP motor models in current production (according to the manufacturer's model number) and whether the motor model is certified to UL 1004-10:2019; and require manufacturers to report to DOE the full-load efficiency of the subject DPPP motor models as determined pursuant to the proposed test procedure. Additionally, if a DPPP motor model is certified to UL 1004-10:2019, DOE proposed to require manufacturers to report the total horsepower and speed configuration of the motor model as provided on the nameplate pursuant to the UL certification. 85 FR 62816, 62820.

DOE received comments in response to the proposed test procedure and labeling requirements in the October 2020 NOPR from the interested parties listed in Table I.1.

**Table I-1 October 2020 NOPR Written Comments**

<b>Commenter(s)</b>	<b>Reference in this NOPR</b>	<b>Commenter Type</b>
Anonymous	Anonymous	NA
Appliance Standards Awareness Project, Consumer Federation of America, Florida Consumer Action Network	ASAP, CFA, and FCAN	Efficiency Organizations
California Energy Commission	CEC	State agency
California Investor-Owned Utilities	CA IOUs	Utilities
Fluidra	Fluidra	Pool Pump Manufacturer
Hayward Industries, Inc.	Hayward	Pool Pump Manufacturer
Natural Resources Defense Council	NRDC	Efficiency Organization
Nidec Motor Corporation	Nidec	Motor Manufacturer
Northwest Energy Efficiency Alliance and Northwest Power and Conservation Council	NEEA and NWPCC	Efficiency Organizations
Pentair Water Pool and Spa, Inc.	Pentair	Pool Pump Manufacturer
Regal Beloit America, Inc.	Regal Beloit	Motor Manufacturer
Speck Pumps	Speck Pumps	Pool Pump Manufacturer
The Pool & Hot Tub Alliance and National Electrical Manufacturers Association	PHTA and NEMA	Trade Association
Underwriters Laboratory LLC	UL	Laboratory

In this final rule, DOE is not establishing a labeling requirement. DOE intends to address labeling separately. DOE may also consider energy conservation standards, but would do so separate from this rulemaking. Comments received specific to labeling or regarding energy conservation standards will be addressed, as appropriate to the extent that DOE addresses either of these issues in a separate notice or notices.

The UL 1004-10:2019 standard referenced in the October 2020 NOPR has since been replaced by an American National Standards Institute (“ANSI”) approved 2020 version published on February 28, 2020. This version was ANSI-approved on January

23, 2020 and therefore, the latest version of the standard is UL 1004-10:2020 “Standard for Safety for Pool Pump Motors” (edition date February 28, 2020).

## **II. Synopsis of the Final Rule**

In this final rule, DOE is establishing a test procedure for DPPP motors. DOE is not, however, establishing separate labeling requirements or energy conservation standards for the DPPP motors within scope of the test procedure established in this final rule.

In this final rule, DOE establishes subpart Z within 10 CFR part 431, “Dedicated-Purpose Pool Pump Motors,” which:

- Specifies that the test procedure applies to “subject DPPP motors” (i.e., DPPP motors with a total horsepower (“THP”) of less than or equal to 5, but does not apply to: (i) DPPP motors that are polyphase motors capable of operating without a drive and distributed in commerce without a drive that converts single-phase power to polyphase power; (ii) waterfall pump motors; (iii) rigid electric spa

pump motors, (iv) storable electric spa pump motors; (v) integral cartridge-filter pool pump motors, and (vi) integral sand-filter pool pump motors);

- Incorporates by reference UL 1004-10:2020 “Standard for Safety for Pool Pump Motors” (“UL 1004-10:2020”) and reference the definitions of that industry standard; and
- Incorporates by reference CSA C747-09 as the energy efficiency test method for DPPP motors.

The effective date for the amended test procedures adopted in this final rule is 30 days after publication of this document in the *Federal Register*.

DOE notes that the use of the test procedure would not be required for Federal certification or labeling purposes until such time as DOE were to establish a label requirement or standards for DPPP motors, (*see* 42 U.S.C. 6315(d); 42 U.S.C. 6316(a); 42 U.S.C. 6295(s))) Accordingly, DOE concludes that this test procedure final rule would not impose added costs for DPPP motor manufacturers. DOE notes that, outside of these contexts, effective 180 days after an applicable test procedure for covered equipment is prescribed, any other representations by manufacturers, distributors, retailers, and private labelers about the energy consumption or cost of energy for these motors must be based on the use of that test procedure. (See 42 U.S.C. 6314(d)(1))

### **III. Discussion**

#### *A. Scope of Applicability*

In the October 2020 NOPR, DOE proposed the scope of the test procedure and labeling requirements for DPPP motors to align with the scope of motors used in pool pumps that are subject to the standards and for which DOE has established an energy performance requirement,<sup>13</sup> both in terms of capacity and categories of equipment (with the six exemptions). 85 FR 62816, 62820. *See also* 10 CFR 431.465. In response to the October 2020 NOPR, NEMA and PHTA supported establishing test procedures and a mandatory labeling requirements for the pool pump motors proposed in scope. (NEMA and PHTA, No. 57 at p. 4) Fluidra, Hayward, Nidec, Pentair, Regal Beloit and Speck Pumps-Pool Products all supported NEMA and PHTA's comment regarding scope.<sup>14</sup> (Fluidra, No. 56 at p. 1; Hayward, No. 62 at p. 2; Nidec, No. 58; Pentair, No. 67 at p. 1; Regal Beloit, No. 61 at p. 1; Speck Pumps-Pool Products, No. 65 at p. 1)

The scope of this final rule is that, as proposed in the October 2020 NOPR. *See* 85 FR 62816, 62820-62821. As noted, this final rule does not establish a labeling requirement. The scope of this test procedure is all pool pump motors with a THP less than or equal to 5 THP, and excludes six categories of motors that correspond to the kinds of motors used in pool pumps for which DOE has not established performance standards. *See* 10 CFR 431.465. DOE notes that DPPP motors are not small electric motors as defined under EPCA.<sup>15</sup> Therefore, the test procedure requirements apply to

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<sup>13</sup> Integral cartridge filter pool pumps and integral sand filter pool pumps subject to standards do not have energy performance requirements. Instead, they must be distributed in commerce with a pool pump timer that is either integral to the pump or a separate component that is shipped with the pump. 10 CFR 431.465(g).

<sup>14</sup> Fluidra, Hayward, Nidec, Pentair, Regal Beloit and Speck Pumps-Pool Products commented in support of the comments submitted by NEMA and PHTA except where noted otherwise in this notice (Fluidra, No. 56 at p. 1; Hayward, No. 62 at p. 1; Nidec, No. 58; Pentair, No. 67 at p. 2; Regal Beloit, No. 61 at p. 1; Speck Pumps-Pool Products, No. 65 at p. 1)

<sup>15</sup> DPPP motors are not general-purpose motors and therefore do not meet the definition of small electric motors. 10 CFR 431.442. Certain DPPP motors have similar characteristics to small electric motors. They can be single-speed, NEMA 2-digit frame size, have open enclosures and can either be capacitor-start induction-run, capacitor-start capacitor-run or polyphase motors. However, these DPPP motors do not

DPPP motors regardless of how the equipment is sold: *i.e.*, whether incorporated in a DPPP or sold separately as a replacement part. The scope is the same as the scope recommended by the Joint Petitioners, which includes pool pump motors regardless of how they are sold – *i.e.*, incorporated in pool pumps, individually sold, and without regard to whether the motor is manufactured domestically or imported. 83 FR 45851, 45855. The scope is also the same as the scope of UL 1004-10:2020. (*See* UL 1004-10:2020 sec. 1.2, 1.3, 1.4) The exemptions, for which definitions are provided in UL 1004-10:2020, are listed as follows:

- polyphase motors capable of operating without a drive and distributed in commerce without a drive that converts single-phase power to polyphase power,
- waterfall pump motors,
- rigid electric spa pump motors,
- storable electric spa pump motors,
- integral cartridge-filter pool pump motors, and
- integral sand-filter pool pump motors.

The upper limit of 5 THP approximates the scope of the pool pumps subject to standards at 10 CFR 431.465(f), which has an upper bound of 2.5 hydraulic horsepower (“HHP”).<sup>16</sup> DOE already defines the term “dedicated-purpose pool pump motor total

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meet all the performance requirements in section 1.05 of NEMA MG1-1987 for general purpose motors (*i.e.* service factor, breakdown torque, locked rotor torque); and/or are designed, marketed for use in pool pump application, or both. Therefore, they do not meet the definition of a small electric motor. Accordingly, EPCA’s exclusion of small electric motors that are a component of a covered product or equipment type from the small electric motors energy conservation standards does not apply to DPPP motors. *See* 42 U.S.C. 6317(b)(3).

<sup>16</sup> A pool pump providing 2.5 HHP typically operates using a 5 THP motor.

horsepower” at 10 CFR 431.462 and establishes how it is determined in section E.3.4 of 10 CFR part 431, subpart Y, appendix C. This approach is identical to the characterization of DPPP motor THP in UL 1004-10:2020 . (See UL 1004-10:2020, sec. 2.6.) UL 1004-10:2020 also directs that the DPPP motor THP to be permanently marked on the nameplate. (See UL 1004-10:2020, sec. 7.1.)

The exemption for polyphase motors applies to three-phase motors operating on three-phase power supply, which means that these motors are most commonly used in commercial applications and not in residential ones. (Residential applications commonly use single-phase power.) The exemptions for polyphase motors do not exempt three-phase motors operating on a single-phase power supply (by connecting the motor to a drive that converts single-phase power to three-phase power). This exemption ensures that DPPP motors used in pool pumps operating on three-phase power, which are not subject to energy performance requirements under 10 CFR part 431, subpart Y, are exempt from the testing requirements. The remaining five exemptions also exempt DPPP motors used in DPPPs that are not subject to energy performance requirements under 10 CFR part 431, subpart Y.

As discussed, the scope of the test procedure requirements is consistent with the scope of motors used in pool pumps that are subject to standards and for which DOE has set an energy performance requirement, with the scope of UL 1004-10:2020, and with the scope recommendations of the Joint Petitioners.

### *B. Definitions*

In the October 2020 NOPR, DOE noted that UL 1004-10:2019 provides definitions for certain pool pump motors relevant to the marking and testing



specifications provided in that industry test standard. 85 FR 62816, 62821. DOE noted that while UL 1004–10:2019 was referenced in the Joint Petition, at the time, UL 1004–10:2019 was in the process of being developed and had not been finalized. *Id.* (See also Joint Petition, No. 14 at p.7) DOE presented the main deviations of the definitions finalized in UL 1004–10:2019 from those recommended by the Joint Petitioners in Table III-1 of the October 2020 NOPR. 85 FR 62816, 62821-62822. DOE proposed to incorporate by reference definitions from UL 1004-10:2019 and requested comment on the proposal. 85 FR 62816, 62822.

In response to the October 2020 NOPR, UL commented that the 2019 version of the UL 1004-10 standard referenced in the NOPR has been replaced by an American National Standards Institute (“ANSI”) approved 2020 version published on February 28, 2020, which includes minor editorial changes. UL also provided information on the ANSI standard approval process, which gathered broader feedback and gained consensus from several stakeholder types. (UL, No. 63 at pp. 1-2) The CA IOUs, NEMA and PHTA commented that DOE should incorporate by reference the UL 1004-10:2020 as it is the most recent version. (CA IOUs, No. 64 at p. 5; NEMA and PHTA, No. 57 at p. 4) NEMA and PHTA stated that the definitions in UL 1004-10:2020 were appropriate. NEMA and PHTA further referenced UL comments regarding the development process for UL 1004-10:2020, which NEMA and PHTA described as compliant with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977 (15 U.S.C. 788; FEAA). (NEMA and PHTA, No. 57 at p. 4)

As noted by commenters, UL 1004-10 was ANSI approved on January 23, 2020 and the latest standard is UL 1004-10:2020 “Standard for Safety for Pool Pump Motors”

(edition date February 28, 2020). DOE reviewed UL 1004-10:2020 and only identified minor editorial updates compared to UL 1004-10:2019 (*See* UL 1004-10:2020 sec 1.1, 2.1, 3.1, and 3.2) and did not identify any updates to the definitions. Therefore, in this final rule, DOE incorporates by reference UL 1004-10:2020 (see section III.D.3) and references the definitions published in that industry standard.

In the October 2020 NOPR, DOE also proposed to rely on the term “manufacturer’s model number,” as currently defined in 10 CFR 431.2, as the identifier used by a manufacturer to uniquely identify the group of identical or essentially identical commercial equipment to which a particular unit belongs and which is generally applicable to commercial equipment. 85 FR 62816, 62822. The manufacturer’s model number typically appears on equipment nameplates, in equipment catalogs and in other product advertising literature. 10 CFR 431.2. DOE proposed to require manufacturers to report to DOE the models in current production (according to the manufacturer’s model number) to which the labeling requirement applies. 85 FR 62816, 62822. DOE requested comment on the proposed use of the term “manufacturer’s model number” as defined at 10 CFR 431.2 for the purpose of reporting to DOE. *Id.*

NEMA and PHTA commented that a manufacturer’s unique identifier is needed. NEMA and PHTA recommended that a catalog or model number be used to describe and track subject DPPP motors throughout the rule’s requirements, as using the catalog or model number would significantly reduce the need for updates to the DOE database. (NEMA and PHTA, No. 57 at p. 5) DOE did not receive any other comments regarding using the term “manufacturer’s model number.”

DOE proposed a definition of “manufacturer's model number” in the context of the proposed reporting required in conjunction with the proposed labeling requirement. As DOE is not adopting a labeling requirement in this final rule, DOE is not adopting the use of the term “manufacturer’s model number” in this final rule.

### *C. Test Procedures*

As discussed in section I.A.1, EPCA provides for the establishment of a test procedure for covered equipment. (42 U.S.C. 6314(a)) The test procedure must be reasonably designed to produce results reflecting the energy efficiency, energy use, and estimated operating costs of the covered equipment and not be unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) While EPCA includes specific test procedure-related requirements for electric motors, these requirements are limited to those motors for which standards are applicable. (*See* 42 U.S.C. 6314(a)(5)) As there are currently no energy conservation standards for DPPP motors, these specific requirements do not apply.

In the October 2020 NOPR, consistent with the statutory framework, DOE proposed to incorporate by reference CSA C747-09 (R2014) (published October 1, 2009 and reaffirmed in 2014) as the prescribed test method for evaluating the energy efficiency of the pool pump motors in scope. 85 FR 62816, 62822. This industry-based test procedure, which is already prescribed by DOE as an alternative testing method for evaluating the efficiency of certain small electric motors, can be applied to the range of electric motors that are used in DPPPs -- including both single-, two-, multi-, and

variable-speed DPPP motors. CSA C747-09 provides for the direct measurement of electrical input power to the motor (or to the drive, as applicable)<sup>17</sup> and mechanical output power (in the form of torque and speed) from the motor (*i.e.*, “input-output” test), and for the calculation of efficiency as the ratio of these two values at different load points. 85 FR 62816, 62822. CSA C747-09 provides that the test method is applicable to motors with drives (also known as "inverters" or "converters"), such as variable-speed drives (see Section 1 and Section 4 of CSA C747-09), and two- and multi-speed motors (see Section 6.6 and 6.7.1 of CSA C747-09), which is inclusive of the scope of DPPP motors. CSA 747-09 is a commonly used industry test method that is reasonably designed to produce results reflecting the energy efficiency, energy use, and estimated operating cost of DPPP motors and is not unduly burdensome to conduct.

In response to the October 2020 NOPR, CA IOUs, NEMA and PHTA commented that CSA C747-09 was the appropriate test standard for DPPP motors and agreed with DOE's proposal to incorporate by reference CSA C747-09. (CA IOUs, No. 64 at p. 5; NEMA and PHTA, No. 57 at p. 5) DOE did not receive any comments opposed to the incorporation by reference of CSA C747-09. Accordingly, in this final rule, DOE incorporates CSA C747-09 by reference at 10 CFR 431.482 as the prescribed test method for evaluating the energy efficiency of the pool pump motors in scope.

#### *D. Metric*

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<sup>17</sup> UL 1004-10:2020 defines a drive as "a power converter, such as a variable-speed drive or phase converter" Section 2.7 of UL 1004-10:2020.

In the October 2020 NOPR, DOE noted that section 6.5 of CSA C747-09 specifies that the motor efficiency must be measured at no fewer than five load points<sup>18</sup> and proposed that the energy efficiency metric for pool pump motors to be the full-load efficiency,<sup>19</sup> consistent with current industry practice. 85 FR 62816, 62822.

The CA IOUs commented that the full-load efficiency metric would provide consumer utility when combined with the UL certification because it would indicate that the pool pump would be suitable for use or replacement in one of those products. (CA IOUs, Public Meeting Transcript, No. 55 at p. 62)

NEMA and PHTA commented in support of using the full-load efficiency as determined by CSA C747-09 as the metric. However, NEMA and PHTA noted that CSA C747-09 measures an efficiency that includes the losses of both the motor and the drive (or "control"). As such, NEMA and PHTA recommended that the metric be described as a "motor system efficiency" (*i.e.*, combined motor and drive efficiency) and not as a motor efficiency. (NEMA and PHTA, No. 57 at p. 5) CA IOUs also recommended describing the metric as a motor system efficiency. (CA IOUs, No. 64 at pp. 5-6)

Nidec, however, commented that full-load efficiency is not an appropriate metric for pool pump motors and asserted that it does not capture the energy saving benefits of variable-speed pool pump motors. Nidec commented that the full-load efficiency of a non-UL 1004-10:2020-compliant single-speed pool pump motor measured in accordance with CSA C747-09 could be higher than the efficiency of a UL 1004-10:2020-compliant

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<sup>18</sup> As specified in section 6.5 of CSA C747-09, the motor efficiency is measured at no fewer than five load points in total, with at least four of which being between 25% and 100% of full-load, and at least one of which being between 100% and 125% of full-load.

<sup>19</sup> For variable-speed motors, Section 3 of CSA C747-09 defines "full-load" as the rated output power at the speed specified by the manufacturer. For all other motors, it is defined as the rated horsepower of the motor (*i.e.* the horsepower indicated on its nameplate).

variable-speed motor, for which the full-load efficiency metric includes the losses of the integrated drive.<sup>20</sup> Nidec asserted that requiring a full-load efficiency metric on the motor nameplate would be confusing to the end-user and is detrimental to the success of implementing the rule. (Nidec, No. 58) Similarly, Regal Beloit commented that a full-load efficiency metric would not be effective in assisting consumers in making purchasing decisions if single-speed motors are still allowed on the market. (Regal Beloit, Public Meeting Transcript, No. 55 at pp. 49-50)

The definitions related to DPPP motors incorporated into this final rule includes "variable-speed control DPPP motors." A DPPP motor, including a variable-speed control DPPP motor, may include a drive which could be physically combined with the motor into a single unit, may include a drive that is physically separate from the DPPP motor, or may not include a drive but the motor is unable to operate without a drive. UL 1004-10:2020 defines a "drive" as "a power converter such as a variable-speed drive or phase converter." (UL 1004-10:2020 sec. 2.7.) The term "drive" is used to describe the category of speed controls used in variable-speed control DPPP motors and certain two- and multi-speed DPPP motors. (See UL 1004-10:2020 sec. 2.11, 2.15, 2.16.) When testing motors with drives, the drive cannot always be tested separately from the motor.

As stated, DOE proposed to incorporate by reference CSA C747-09 as the prescribed test method for evaluating the energy efficiency of the pool pump motors in scope. 85 FR 62816, 62822-62823. When the motor requires a drive to operate, CSA C747-09 provides that testing includes testing of the drive (see Section 4 of CSA C747-

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<sup>20</sup> For example, a motor could have a full-load efficiency of 70 percent compared to a motor (70 percent full-load efficiency) and integrated controls (95 percent full-load efficiency) with a full-load efficiency of  $70 \times 95 = 66.5$  percent. (Nidec, No. 58)

09).<sup>21</sup> Based on its review of catalogs, DOE has determined that DPPP motors that operate with a drive, either have an integrated drive, or are sold in conjunction with a drive (including when the motor is unable to operate without a drive).<sup>22</sup> NEMA, PHTA, and the CA IOUs, stated manufacturers test DPPP motors with drives inclusive of the drive. As such, the measured full-load efficiency of the DPPP motor includes the efficiency of the drive if a drive is integrated into the motor, or the motor cannot operate without the presence of a drive.

This final rule maintains the “full-load efficiency” as the description of the metric for DPPP motors. DOE is concerned that the term “motor system efficiency,” or some variant, could be misunderstood to mean that the measured value includes the efficiency of components other than the DPPP motor (*e.g.*, as inclusive of the pool pump). In addition, not all DPPP motors include a drive (*e.g.*, single-speed DPPP motors).

To address stakeholder concerns regarding the description of the metric and to reflect the inclusion of the drive, as appropriate, DOE is clarifying that the measured full-load efficiency of the DPPP motor is inclusive of the drive if the DPPP motor is placed into commerce with a drive or is unable to operate without the presence of a drive. In addition, the provisions of section 4 of CSA C747 would still apply, and DOE adds that the measured full-load efficiency of the DPPP motor is also inclusive of the drive if the

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<sup>21</sup> CSA C747-09 uses the term “inverter” motor and “converter,” but as evidenced by the definition in UL 1004-10:2020, a “converter” and drive are synonymous. NEMA MG 1-2016, “American National Standard for Motors and Generators” paragraph 30.2.1.5 defines the term “control” as “devices that are also called inverters and converters”.

<sup>22</sup> As the DPPP motors are replacement motors, absent a specific drive identified, the applicable drive would be that in the dedicated-purpose pool pump for which the motor serves as a replacement.

DPPP motor requires a drive to operate, regardless of whether the DPPP motor is sold with a drive.

#### *E. Harmonization with Industry Standards*

On February 14, 2020, DOE finalized its rule, “Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment” (“the Process Rule”). 85 FR 8626. The Process Rule requires DOE to adopt industry test standards as DOE test procedures for covered products and equipment, unless such methodology would be unduly burdensome to conduct or would not produce test results that reflect the energy efficiency, energy use, water use (as specified in EPCA) or estimated operating costs of that equipment during a representative use cycle. Section 8(c) of appendix A 10 CFR part 430 subpart C; 10 CFR 431.4.<sup>23</sup> In cases where the industry standard does not meet EPCA statutory criteria for test procedures, DOE will make modifications through the rulemaking process to these standards as the DOE test procedure.

The test procedures for DPPP motors at new subpart Z to part 431 incorporates by reference the test standard CSA C747-09 (reaffirmed in 2014), Energy Efficiency Test Methods for Small Motors, without modification. CSA C747-09 is an industry-accepted test procedure that measures the energy efficiency of certain motors, and is applicable to DPPP motors in scope sold in North America. CSA C747-09 includes specifications for the test setup, instrumentation, test conduct, and calculations. DOE also incorporates by reference UL 1004-10:2020, Standard for Safety for Pool Pump Motors, without modification, to reference the definitions published in the same standard. UL 1004-

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<sup>23</sup> This practice implements the National Technology Transfer and Advancement Act and OMB Circular A-119 with respect to the adoption of industry standards. (See 85 FR 8679-8680).



10:2020 establishes definitions and marking requirements for certain pool pump motors and describes methods to verify the information conveyed by those required markings.

*F. Effective Date*

EPCA prescribes that, if DOE establishes or amends a test procedure, all representations of energy efficiency and energy use, including those made on marketing materials and product labels, must be made in accordance with that test procedure, beginning 180 days after publication of such a test procedure final rule in the *Federal Register*. (42 U.S.C. 6314(d)(1))

If DOE were to establish a new, or amend an existing test procedure, EPCA provides an allowance for individual manufacturers to petition DOE for an extension of the 180-day period to begin making representations if the manufacturer may experience undue hardship in meeting the deadline. (42 U.S.C. 6314(d)(2)) To receive such an extension, petitions must be filed with DOE no later than 60 days before the end of the 180-day period and must detail how the manufacturer will experience undue hardship. (*Id.*)

DOE received a number of comments involving the effective and compliance dates focusing on the labeling requirements proposed in the October 2020 NOPR. As DOE is not finalizing that aspect of the October 2020 NOPR, DOE will address those comments in a future rulemaking regarding the labeling requirements.

The effective date for the established test procedure will be 30 days after publication of this final rule in the *Federal Register*. The test procedure established in this final rule does not require manufacturers to test DPPP motors for certification of

compliance with standards or labeling requirements. But when manufacturers, distributors, retailers, and private labelers make any representations respecting the energy consumption or cost of energy consumed by DPPP motors, such representations must be made in accordance with the test procedure. (*See* 42 U.S.C. 6314(d)(1))

#### **IV. Procedural Issues and Regulatory Review**

##### *A. Review Under Executive Order 12866*

The Office of Management and Budget (“OMB”) has determined this test procedure rulemaking does not constitute a “significant regulatory action” under section 3(f) of Executive Order (“E.O.”)12866, *Regulatory Planning and Review*, 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review under the Executive order by the Office of Information and Regulatory Affairs (“OIRA”) in OMB.

##### *B. Review Under the Regulatory Flexibility Act*

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires preparation of a final regulatory flexibility analysis (FRFA) for any final rule where the agency was first required by law to publish a proposed rule for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available

on the Office of the General Counsel's website: <https://energy.gov/gc/office-general-counsel>.

In this final rule, DOE establishes a test procedure for DPPP motors. This final rule does not establish a labeling requirement and DOE intends to address any such labeling requirement in a separate notice. Further, this final rule does not establish energy conservation standards for DPPP motors. Were DOE to consider energy conservation standards for this equipment, it would do so in a separate rulemaking.

DOE reviewed this final rule to establish a test procedure for DPPP motors under the provisions of the Regulatory Flexibility Act and the procedures and policies published on February 19, 2003. DOE uses the Small Business Administration's (SBA) small business size standards to determine whether manufacturers qualify as small businesses, which are listed by the North American Industry Classification System (NAICS). The SBA considers a business entity to be a small business, if, together with its affiliates, it employs less than a threshold number of workers specified in 13 CFR part 121. The 2017 NAICS code for DPPP motors is 335312, motor and generator manufacturing. The threshold number for NAICS code 335312 is 1,250 employees.<sup>24</sup> This employee threshold includes all employees in a business's parent company and any other subsidiaries.

As previously stated, use of the test procedure would not be required until such time as DOE were to establish a label requirement or energy conservation standards for DPPP motors. (*See*, 42 U.S.C. 6315(d) and 42 U.S.C. 6314(a)(5)(A), respectively) Accordingly, manufacturers would only incur costs if/when DOE were to establish a

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<sup>24</sup> [www.sba.gov/document/support-table-size-standards](https://www.sba.gov/document/support-table-size-standards). Last accessed on December 11, 2020.

labeling and/or energy conservation standards for DPPP motors. Therefore, DOE estimates that the adopted test procedure would not result in any DPPP motor manufacturer, large or small, to incur any additional costs.

Therefore, DOE certifies that the impacts of the adopted test procedure requirement in this final rule would not have a “significant economic impact on a substantial number of small entities,” and that the preparation of an FRFA is not warranted. DOE has transmitted the certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

#### *C. Review Under the Paperwork Reduction Act of 1995*

Manufacturers of electric motors must certify to DOE that their products comply with any applicable energy conservation standards. To certify compliance, manufacturers must first obtain test data for their products according to the DOE test procedures, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including electric motors. (See generally 10 CFR part 429.) The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (“PRA”). This requirement has been approved by OMB under OMB control number 1910-1400. Public reporting burden for the certification is estimated to average 35 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This final rule does not establish any certification or

recordkeeping requirements on manufacturers. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

#### *D. Review Under the National Environmental Policy Act of 1969*

Pursuant to the National Environmental Policy Act of 1969 (“NEPA”), DOE has analyzed this proposed action in accordance with NEPA and DOE’s NEPA implementing regulations (10 CFR part 1021). DOE has determined that this rule qualifies for categorical exclusion under 10 CFR part 1021, subpart D, appendix A5, because it is an interpretive rulemaking that does not change the environmental effect of the rule and meets the requirements for application of a CX. See 10 CFR 1021.410. Therefore, DOE has determined that promulgation of this rule is not a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA, and does not require an Environmental Assessment or an Environmental Impact Statement.

#### *E. Review Under Executive Order 13132, “Federalism”*

Executive Order 13132, “Federalism,” 64 FR 43255 (August 4, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. The Executive order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the

development of regulatory policies that have federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE examined this final rule and determined that it will not have a substantial direct effect on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this final rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) No further action is required by Executive Order 13132.

*F. Review Under Executive Order 12988, "Civil Justice Reform"*

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform," 61 FR 4729 (Feb. 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms;

and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this final rule meets the relevant standards of Executive Order 12988.

#### *G. Review Under the Unfunded Mandates Reform Act of 1995*

Title II of the Unfunded Mandates Reform Act of 1995 (“UMRA”) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104-4, sec. 201 (codified at 2 U.S.C. 1531). For a regulatory action resulting in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of \$100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at <https://energy.gov/gc/office-general-counsel>. DOE examined this final rule according to

UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of \$100 million or more in any year, so these requirements do not apply.

*H. Review Under the Treasury and General Government Appropriations Act, 1999*

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Public Law 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This final rule will not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

*I. Review Under Executive Order 12630*

DOE has determined, under Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights” 53 FR 8859 (March 18, 1988), that this regulation will not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

*J. Review Under Treasury and General Government Appropriations Act, 2001*

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB’s guidelines were published at 67 FR 8452 (Feb. 22,



2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). Pursuant to OMB Memorandum M-19-15, Improving Implementation of the Information Quality Act (April 24, 2019), DOE published updated guidelines which are available at [www.energy.gov/sites/prod/files/2019/12/f70/DOE%20Final%20Updated%20IQA%20Guidelines%20Dec%202019.pdf](http://www.energy.gov/sites/prod/files/2019/12/f70/DOE%20Final%20Updated%20IQA%20Guidelines%20Dec%202019.pdf). DOE has reviewed this final rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

#### *K. Review Under Executive Order 13211*

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB, a Statement of Energy Effects for any significant energy action. A "significant energy action" is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use if the regulation is implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This regulatory action is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by

the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

*L. Review Under Section 32 of the Federal Energy Administration Act of 1974*

Under section 301 of the Department of Energy Organization Act (Public Law 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (FTC) concerning the impact of the commercial or industry standards on competition.

The modifications to the test procedure for DPPP motors adopted in this final rule incorporates testing methods contained the following commercial standards: UL 1004-10:2020 and CSA C747-09. DOE has evaluated these standards and is unable to conclude whether it fully complies with the requirements of section 32(b) of the FEAA (*i.e.*, whether it was developed in a manner that fully provides for public participation, comment, and review.) DOE has consulted with both the Attorney General and the Chairman of the FTC about the impact on competition of using the methods contained in these standards and has received no comments objecting to their use.

*M. Congressional Notification*

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule before its effective date. The report will state that it has been determined that the rule is not a "major rule" as defined by 5 U.S.C. 804(2).

#### *N. Description of Materials Incorporated by Reference*

In this final rule, DOE incorporates by reference the test standard published by CSA, titled, Energy Efficiency Test Methods for Small Motors, CSA C747-09 (reaffirmed in 2014, including Update 1). CSA C747-09 is an industry-accepted test procedure that measures the energy efficiency of certain motors, and is applicable to pool pump motors in scope sold in North America. The test procedure references various sections of CSA C747-09 that address test setup, instrumentation, test conduct, and calculations. CSA C747-09 is readily available at CSA's website at <https://webstore.ansi.org/standards/csa/csac74709>.

In this final rule, DOE also incorporates by reference the standard published by UL, titled, Standard For Safety for Pool Pump Motors, UL 1004-10:2020. UL 1004-10:2020 establishes definitions for certain pool pump motors and describes methods to verify the information conveyed by those required markings. UL 1004-10:2020 is readily available at UL's website at [www.shopulstandards.com/ProductDetail.aspx?productId=UL1004-10\\_1\\_S\\_20200228](http://www.shopulstandards.com/ProductDetail.aspx?productId=UL1004-10_1_S_20200228).

### **V. Approval of the Office of the Secretary**

The Secretary of Energy has approved publication of this final rule.

## **List of Subjects in 10 CFR Part 431**

Administrative practice and procedure, Confidential business information, Energy conservation test procedures, Incorporation by reference, Reporting and recordkeeping requirements.

### **Signing Authority**

This document of the Department of Energy was signed on July 19, 2021, by Kelly Speakes-Backman, Principal Deputy Assistant Secretary and Acting Assistant Secretary for Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on July 20, 2021.

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Treena V. Garrett,  
Federal Register Liaison Officer,  
U.S. Department of Energy.

For the reasons stated in the preamble, DOE amends part 431 of chapter II of title 10, Code of Federal Regulations as follows:

**PART 431—ENERGY EFFICIENCY PROGRAM FOR CERTAIN  
COMMERCIAL AND INDUSTRIAL EQUIPMENT**

1. The authority citation for part 431 continues to read as follows:

**Authority:** 42 U.S.C. 6291-6317; 28 U.S.C. 2461 note.

2. Section 431.11 is amended by adding a sentence at the end of the paragraph to read as follows:

**§431.11 Purpose and scope.**

\*\*\* This subpart does not cover electric motors that are “dedicated-purpose pool pump motors,” which are addressed in subpart Z of this part.

3. Section 431.441 is amended by adding a sentence at the end of the paragraph to read as follows:

**§431.441 Purpose and scope.**

\*\*\* This subpart does not cover electric motors that are “dedicated-purpose pool pump motors,” which are addressed in subpart Z of this part.

4. Add subpart Z, consisting of §§431.481 through 431.484, to read as follows:

**Subpart Z – Dedicated-Purpose Pool Pump Motors**

**Sec.**

431.481 Purpose and scope.

431.482 Materials incorporated by reference.

431.483 Definitions.

431.484 Test procedure.

**§431.481 Purpose and scope.**

(a) *Purpose.* This subpart contains definitions and test procedures requirements for electric motors that are dedicated-purpose pool pump motors, pursuant to Part A-1 of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6311-6317. It also identifies materials incorporated by reference in this part. This subpart does not cover other “electric motors,” which are addressed in subpart B of this part, nor does it cover “small electric motors,” which are addressed in subpart X of this part.

(b) *Scope.* The requirements of this subpart apply to dedicated-purpose pool pump motors, as specified in paragraphs 1.2, 1.3 and 1.4 of UL 1004-10:2020 (incorporated by reference, see §431.482).

(c) *Incorporation by reference.* In §431.482, DOE incorporates by reference entire standards for use in this subpart; however, only the provisions of the document enumerated in an approved section are applicable within §431.482.

**§431.482 Materials incorporated by reference.**

(a) *General.* Certain material is incorporated by reference into this subpart with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, DOE must publish a document in the Federal Register and the material must be available to the public. Standards can be obtained from the sources in this section. All approved material is available for inspection at the U.S. Department of Energy, Office of Energy

Efficiency and Renewable Energy, Building Technologies Program, sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945, <https://www.energy.gov/eere/buildings/appliance-and-equipment-standards-program>, and may be obtained from the other sources in this section. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

(b) CSA. Canadian Standards Association, Sales Department, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 1-800-463-6727, or <https://www.csagroup.org/store>.

(1) CSA C747-09 (Reaffirmed 2014) (“CSA C747-09”), “Energy efficiency test method for small motors” as revised through August 2016, including Update No. 1; IBR approved for §431.484.

(2) [Reserved]

(c) UL. Underwriters Laboratories, 333 Pfingsten Road, Northbrook, IL 60062, (841) 272-8800, or go to <https://www.ul.com>.

(1) UL 1004-10 (1004-10:2020), “Standard for Safety for Pool Pump Motors,” First Edition, Dated February 28, 2020; ; IBR approved for §§431.481 and 431.483.

(2) [Reserved]

### **§431.483 Definitions.**

The definitions applicable to this subpart are defined in Section 2 "Glossary" of UL 1004-10:2020 (incorporated by reference, see §431.482).

**§431.484 Test procedure.**

(a) *Scope.* Pursuant to section 343(a) of EPCA, this section provides the test procedures for measuring the efficiency of dedicated-purpose pool pump motors. (42 U.S.C. 6314) For purposes of this part and EPCA, the test procedures for measuring the efficiency of dedicated-purpose pool pump motors shall be the test procedure specified in paragraph (b) of this section.

(b) *Testing and calculations.* At such time as compliance is required with a labeling requirement or an energy conservation standard, the full-load efficiency of each dedicated-purpose pool pump motor model (inclusive of the drive, if the dedicated-purpose pool pump motor model is placed into commerce with a drive, or is unable to operate without the presence of a drive) is determined in accordance with CSA C747-09, Section 1.6 "Scope", Section 3 "Definitions", Section 4 "General requirements", Section 5, "General test requirements", and Section 6 "Test method" (incorporated by reference, see §431.482).